

(12) International Application Status Report

Received at International Bureau: 07 June 2004 (07.06.2004)

Information valid as of: (..)

Report generated on: 19 January 2021 (19.01.2021)

(10) Publication number:

WO2004/096346

(43) Publication date:

11 November 2004 (11.11.2004)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2004/012094

(22) Filing Date:

19 April 2004 (19.04.2004)

(25) Filing language:

English (EN)

(31) Priority number(s):

10/424,538 (US)

(31) Priority date(s):

25 April 2003 (25.04.2003)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

A61B 5/0452 (2006.01); **A61N 1/37** (2006.01)

(71) Applicant(s):

MEDTRONIC, INC. [US/US]; MS LC340 710 Medtronic Parkway Minneapolis, MN 55432 (US) *(for all designated states except US)*

VAN OORT, Geeske [NL/NL]; Berweg 38 NL-6881 LT Velp (NL) *(for US only)*

OOSTERHOFF, Peter [NL/NL]; Ruysdaelstraat 22 NL-7204 CD Zulphen (NL) *(for US only)*

DE BRUYN, Henricus, W. M. [NL/NL]; Neelandstuijstraat 39 NL-6822 DG Amhem (NL) *(for US only)*

SCHOLTEN, Patrick [NL/NL]; Braamkamp 400 NL-7206 HT Zulphen (NL) *(for US only)*

(72) Inventor(s):

VAN OORT, Geeske; Berweg 38 NL-6881 LT Velp (NL)

OOSTERHOFF, Peter; Ruysdaelstraat 22 NL-7204 CD Zulphen (NL)

DE BRUYN, Henricus, W. M.; Neelandstuijstraat 39 NL-6822 DG Amhem (NL)

SCHOLTEN, Patrick; Braamkamp 400 NL-7206 HT Zulphen (NL)

(74) Agent(s):

SOLDNER, Michael.; MS LC340 710 Medtronic Parkway Minneapolis, MN 55432 (US)

(54) Title (EN): FORM ANALYSIS OF A HEART SIGNAL TO DETECT EVOKED RESPONSE

(54) Title (FR): ANALYSE FORMELLE PERMETTANT DE DETECTER UNE REPONSE EVOQUEE

(57) Abstract:

(EN): Method and device for determining capture status of a heart chamber that receives a pulse from an implantable pulse generator (IPG). Signal processing can be used to improve the reliability of capture detection by transforming the sensed response signal into a set of morphological characteristics. Analysis of selected morphological characteristics serves to distinguish signals indicative of capture from signals indicative of loss of capture.

(FR): L'invention concerne un procédé et un dispositif permettant de déterminer le statut de saisie d'une cavité cardiaque qui reçoit une impulsion d'un générateur d'impulsion implantable (IPG). Le traitement de signaux sert à améliorer la fiabilité de la détection de saisie par la transformation du signal réponse détecté en un ensemble de caractéristiques morphologiques. L'analyse des caractéristiques morphologiques permet de distinguer les signaux indicateurs de saisie des signaux indicateurs de perte de saisie.

International search report:

Received at International Bureau: 18 October 2004 (18.10.2004) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

European Patent Office (EPO) : AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate